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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,645	08/05/2003	Jianzhou Wu	0425-1067P	5831
2292 7590 02/08/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER FELTON, AILEEN BAKER	
			ART UNIT 1755	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/08/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/633,645

Applicant(s)

WU ET AL.

Examiner

Aileen B. Felton

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) 5, 11-13, 16, 17, 19-22, 24 and 27 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4, 6-10, 14, 15, 18, 23, 25, 26 and 28-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 29 recites "consisting essentially of" as its claim scope but includes optional ingredients. Since this claim scope is closed ended, there cannot be optional ingredients.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 8-10, 23, 25-26, and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by (6,132,537).

Zeuner discloses gas generating composition that comprises a fuel from 20-60 % of melamine, cyanuric acid and their salts and derivatives, an oxidizer such as basic copper nitrate from 10-50 %, and metal oxides (col. 2, lines 1-20 and 53-56, and claim 1).

4. Claims 1-4, 6-10, 23, 25-26, and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Scheffee et al (5,861,571).

Art Unit: 1755

Scheffee discloses a composition with a melamine and cyanuric acid derivative, cellulose binders, hydroxides (col. 4) and ammonium perchlorate (col. 3). The amounts are shown in col. 2 and col. 4 as well as in the Table.

5. Claims 1-4, 7, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Blount (6,054,515).

Blount discloses a composition comprising a thermoplastic resin (binder) (col. 5), a metal-containing compound such as metal oxides or aluminum hydroxide (col. 7), and a filler such as melamine cyanurate (see claim 5).

Claim Rejections - 35 USC § 103

6. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeuner (6,132,537) as applied above, in view of Zhou (6,468,369) or Matsuda (5,780,767).

The composition also includes typical processing aids but not the specific binder.

Both Zhou and Matsuda teach the use of sodium carboxymethylcellulose in col. 4, lines 25-35 and col. 3, lines 4-6, respectively.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the sodium carboxymethylcellulose taught by Zhou or Matsuda into the composition of Zeuner since both Zhou and Matsuda disclose that it is a known binder for gas generating compositions.

7. Claim 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeuner (6,132,537) in view of Zhou (6,468,369) or Matsuda (5,780,767) as applied above, and further in view of Hinshaw et al (5,970,703).

Hinshaw et al teaches the use of aluminum hydroxide as a coolant in a gas generating composition.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coolant as taught by Hinshaw with the composition disclosed by Zeuner, Zhou, and Matsuda since Hinshaw suggests that it is useful as an additive for gas generating compositions.

8. Claims 1-4, 6-10, 14, 23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (6,505,562) in view of Taylor et al (6,096,147).

Wu discloses a gas generating composition that comprises a fuel which can be a mixture of melamine derivatives and sodium carboxymethylcellulose in amount from 3-40 % (col. 3 and 4). The composition also includes additives such as cobalt oxide and an oxidizer from 30-94 %; however, the specific oxidizer is not disclosed.

Taylor teaches the known use of basic copper nitrate in a gas generating composition with a carboxymethylcellulose binder (col. 5, lines 1-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the basic copper nitrate taught by Taylor into the composition of Wu since Taylor suggest that both basic copper nitrate and ammonium nitrate can be used and since Wu is using ammonium nitrate as the oxidizer. In the alternative, it is prima facie obvious to combine two compositions, each taught for the

same purpose to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (6,505,562) in view of Taylor et al (6,096,147) as applied above and further in view of Hinshaw et al (5,970,703).

Hinshaw et al teaches the use of aluminum hydroxide as a coolant in a gas generating composition.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coolant as taught by Hinshaw with the composition disclosed by Wu and Taylor since Hinshaw suggests that it is useful as an additive for gas generating compositions.

10. Claims 1-4, 6-10, 14, 23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al (6,096,147) in view of Khandhadia et al (6,210,505).

Taylor discloses a gas generating composition that comprises basic copper nitrate with a carboxymethylcellulose binder and additives(col. 5, lines 1-30). The fuels include tetrazoles, cyanamide etc, but the specific fuel is not disclosed.

Khandhadia teaches a variety of fuels used in gas generating compositions and includes azines such as melamine, tetrazoles, and amides.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the melamine as taught by Khandhadia into the composition of Taylor since Khandhadia suggests that the fuel is useful in gas

generating composition and equates melamine to other tetrazoles and amide fuels and also since Taylor discloses that a variety of fuel materials can be used.

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al (6,096,147) in view of Khandhadia et al (6,210,505) as applied above, and further in view of Hinshaw et al (5,970,703).

Hinshaw et al teaches the use of aluminum hydroxide as a coolant in a gas generating composition.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coolant as taught by Hinshaw with the composition disclosed by Taylor and Khandhadia since Hinshaw suggests that it is useful as an additive for gas generating compositions.

Response to Arguments

12. Applicant's arguments have been fully considered but they are not persuasive. Applicants arguments regarding Zeuner and Scheffee are not persuasive as both disclose melamine and cyanuric acid with their salts and derivative. Further, it is irrelevant whether Blount refers to the melamine cyanurate as a fuel or a filler. The compound is in the composition and thus meets the claim limitations. The teaching references are used to show commonly used and well-known ingredients and modifications of the amounts of the ingredients in the air bag art. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

Art Unit: 1755

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen B. Felton whose telephone number is 571.272.6875. The examiner can normally be reached on Monday-Friday 6:30-4:00, except alternate Fridays.

Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571.272.1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AILEEN FELTON
PRIMARY EXAMINER